

WHAT IS CLAIMED IS:

1. A method comprising:
  - a) first subjecting an oxygen scavenger having a target scavenging rate to an initial dose of actinic radiation insufficient to trigger the oxygen scavenger; then
  - b) second subjecting the oxygen scavenger to a final dose of actinic radiation at a dosage, wherein the total energy of all doses is sufficient to trigger the oxygen scavenger.
2. The method of claim 1, further comprising, after the first subjecting step and before the second subjecting step,
  - c) storing the oxygen scavenger.
3. The method of claim 2, wherein the storing step comprises storing the oxygen scavenger in a container.
4. The method of claim 3, wherein the container is configured such that the oxygen scavenging capacity of the oxygen scavenger or the oxygen scavenging rate of the oxygen scavenger is depleted by less than or equal to about 35% while in the container.
5. The method of claim 3, wherein the container comprises a barrier resin.
6. The method of claim 5, wherein the barrier resin has an oxygen transmission rate of less than  $500 \text{ cm}^3 / \text{m}^2 \cdot \text{day} \cdot \text{atm}$  (ASTM D 3985-95).
7. The method of claim 5, wherein the barrier resin is selected from the group consisting of:
  - i) a polymer or copolymer of vinyl alcohol,
  - ii) a polymer or copolymer of vinylidene dichloride,
  - iii) vinylidene chloride/methyl acrylate copolymer,

- iv) a polyamide other than MXD6,
- v) polyester,
- vi) a polymer or copolymer of an epoxy,
- vii) a polysulfone,
- 5 viii) a polymer or copolymer of acrylonitrile, and
- ix) a polymer or copolymer of an isocyanate.

8. The method of claim 3, wherein the container comprises an oxygen scavenger.

10 9. The method of claim 5, wherein the container comprises an oxygen scavenger.

10. The method of claim 3, wherein the container comprises an opaque material.

15 11. The method of claim 3, wherein the container comprises a material selected from the group consisting of:

- a) a metal foil;
- b) a metalized foil; and
- c) an oxide coated web.

20 12. The method of claim 3, wherein the container is in the form of a pouch.

13. The method of claim 3, wherein the oxygen scavenger is stored under an inert atmosphere.

25 14. The method of claim 3, wherein the oxygen scavenger is stored under vacuum.

15. The method of claim 2, wherein the oxygen scavenger is stored at a subambient temperature.

16. The method of claim 1, wherein between the first subjecting step and the second subjecting step the oxygen scavenging capacity of the oxygen scavenger or the oxygen scavenging rate of the oxygen scavenger is depleted by less than or equal to about 35%.

5 17. The method of claim 1, wherein the initial dose has an energy  $X'$ , wherein  $X'$  is an amount of energy which induces an oxygen scavenging rate of less than or equal to about 20% of the target scavenging rate of the oxygen scavenger.

10 18. The method of claim 17, wherein the final dose has an energy  $Y'$  and  $Y'$  is an amount of energy such that the total energy  $X' + Y'$  triggers an oxygen scavenging rate of at least about the target scavenging rate of the oxygen scavenger.

19. The method of claim 1, wherein the oxygen scavenger comprises a material selected from the group consisting of:

- 15 i) oxidizable organic compound and a transition metal catalyst,  
ii) ethylenically unsaturated hydrocarbon and a transition metal catalyst,  
iii) a reduced form of a quinone, a photoreducible dye, or a carbonyl compound that has absorbance in the UV spectrum,  
iv) a polymer having a polymeric backbone and a cyclic olefinic pendent  
20 group,  
v) a copolymer of ethylene and a strained, cyclic alkylene,  
vi) ethylene/vinyl aralkyl copolymer,  
vii) a polymer having a polyethylenic backbone and pendant or terminal  
moieties comprising allylic moieties having at least one alpha hydrogen,  
25 viii) ethylene/methyl acrylate/benzyl acrylate terpolymer (EMBZ),  
ix) MXD6,  
x) a condensation polymer containing at least one carbon-carbon double  
bond, and  
xi) mixtures thereof.

20. The method of claim 19, wherein the polymer (iv) further comprises a linking group linking the cyclic olefinic pendent group to the polymeric backbone.

5 21. The method of claim 19, wherein the polymer (iv) is EVCH, EMCM, ECHA, or CHAA.

22. The method of claim 1, further comprising, before step b), making a package comprising the oxygen scavenger.

10 23. The method of claim 1, further comprising, after step b), making a package comprising the triggered oxygen scavenger.

15 24. The method of claim 1, wherein the actinic radiation in the first subjecting step is infrared light, microwave, visible light, ultraviolet light, X-ray, gamma ray, corona discharge, or electron beam irradiation; and the actinic radiation in the second subjecting step is infrared light, microwave, visible light, ultraviolet light, X-ray, gamma ray, corona discharge, or electron beam irradiation.

20 25. The method of claim 1, further comprising, before step b), filling a package comprising the oxygen scavenger with a product.

26. The method of claim 1, further comprising, after step b), filling a package comprising the oxygen scavenger with a product.

25 27. The method of claim 1, wherein the first subjecting step comprises subjecting the oxygen scavenger to two or more initial doses of actinic radiation, wherein the total energy of the initial doses is insufficient to trigger the oxygen scavenger.

28. A stored oxygen scavenger, comprising:

- a) an oxygen scavenger that has been subjected to actinic radiation at a dosage insufficient to trigger the oxygen scavenger.

29. The stored oxygen scavenger of claim 28, wherein the oxygen scavenger is stored in a container.

30. The stored oxygen scavenger of claim 29, wherein the container is configured such that the oxygen scavenging capacity of the oxygen scavenger or the oxygen scavenging rate of the oxygen scavenger is depleted by less than or equal to about 35%.